

109TH CONGRESS  
2D SESSION

# H. R. 5029

To establish in the Department of Homeland Security a Domestic Nuclear Detection Office to improve the ability of the United States to detect and prevent acts of nuclear and radiological terrorism and to enhance coordination of such efforts across Federal agencies, and for other purposes.

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## IN THE HOUSE OF REPRESENTATIVES

MARCH 28, 2006

Mr. LINDER (for himself, Mr. LANGEVIN, Mr. KING of New York, Mr. McCAUL of Texas, Mr. SHAYS, Mr. SIMMONS, Mr. THOMPSON of Mississippi, Mr. DICKS, Mr. DENT, Mr. DANIEL E. LUNGREN of California, and Ms. JACKSON-LEE of Texas) introduced the following bill; which was referred to the Committee on Homeland Security

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## A BILL

To establish in the Department of Homeland Security a Domestic Nuclear Detection Office to improve the ability of the United States to detect and prevent acts of nuclear and radiological terrorism and to enhance coordination of such efforts across Federal agencies, and for other purposes.

1       *Be it enacted by the Senate and House of Representa-*  
2       *tives of the United States of America in Congress assembled,*

1 **SECTION 1. SHORT TITLE.**

2 This Act may be cited as the “Prevention of Nuclear  
3 Terrorism Act of 2006”.

4 **SEC. 2. ESTABLISHMENT OF DOMESTIC NUCLEAR DETEC-**  
5 **TION OFFICE.**

6 (a) ESTABLISHMENT OF OFFICE.—The Homeland  
7 Security Act of 2002 (6 U.S.C. 101 et seq.) is amended  
8 by adding at the end the following new title:

9 **“TITLE XIX—OFFICE OF DOMES-**  
10 **TIC NUCLEAR DETECTION**

11 **“SEC. 1901. DOMESTIC NUCLEAR DETECTION OFFICE.**

12 “(a) IN GENERAL.—There shall be in the Depart-  
13 ment of Homeland Security a Domestic Nuclear Detection  
14 Office.

15 “(b) PURPOSE.—The purpose of the Office shall be  
16 to protect against the unauthorized importation, posses-  
17 sion, storage, transportation, development, or use of a nu-  
18 clear explosive device, fissile material, or radiological ma-  
19 terial against the United States.

20 “(c) DIRECTOR.—The Office shall be headed by a Di-  
21 rector of Domestic Nuclear Detection, who shall be ap-  
22 pointed by the President from among individuals nomi-  
23 nated by the Secretary.

24 “(d) LIMITATION.—This subtitle shall not be con-  
25 strued to affect the performance, by directorates and  
26 agencies of the Department other than the Office, of func-

1 tions that are not related to detection and prevention of  
2 nuclear and radiological terrorism.

3 **“SEC. 1902. FUNCTIONS OF DIRECTOR OF THE DOMESTIC**  
4 **NUCLEAR DETECTION OFFICE, GENERALLY.**

5 “(a) IN GENERAL.—The Secretary shall vest in the  
6 Director the primary responsibility in the Department  
7 for—

8 “(1) administering all nuclear and radiological  
9 detection and prevention functions and assets of the  
10 Department, including those functions vested in the  
11 Department before the enactment of the Prevention  
12 of Nuclear Terrorism Act of 2006; and

13 “(2) for coordinating such administration with  
14 nuclear and radiological detection and prevention ac-  
15 tivities of other Federal departments and agencies.

16 “(b) TRANSFER OF FUNCTIONS.—The Secretary  
17 shall transfer to the Director the authority to administer,  
18 or supervise the administration of, all functions, per-  
19 sonnel, assets, and liabilities of all Department programs  
20 and projects relating to nuclear and radiological detection  
21 research, development, testing, and evaluation, and nu-  
22 clear and radiological detection system acquisition and de-  
23 ployment, including with respect to functions and assets  
24 transferred by section 303(1)(B), (C), and (E) and func-

1 tions, assets, and personnel transferred pursuant to sec-  
2 tion 1910(c).

3 **“SEC. 1903. GLOBAL NUCLEAR DETECTION ARCHITECTURE.**

4 “(a) IN GENERAL.—The Director shall coordinate  
5 the Federal Government’s implementation of a global nu-  
6 clear detection architecture.

7 “(b) FUNCTIONS OF DIRECTOR.—The Director shall,  
8 under subsection (a)—

9 “(1) design a strategy that will guide deploy-  
10 ment of the global nuclear detection architecture;

11 “(2) implement the strategy in the United  
12 States; and

13 “(3) coordinate Department and Federal inter-  
14 agency efforts to deploy the elements of the global  
15 nuclear detection architecture outside the United  
16 States.

17 “(c) RELATIONSHIP TO OTHER DEPARTMENTS AND  
18 AGENCIES.—The authority of the Director under this sec-  
19 tion shall not affect an authority or responsibility of any  
20 other department or agency of the Federal Government  
21 with respect to the deployment of nuclear and radiological  
22 detection systems outside the United States under any  
23 program administered by that department or agency.

1   **“SEC. 1904. RESEARCH AND DEVELOPMENT.**

2           “(a) IN GENERAL.—The Director shall carry out a  
3 research and development program to achieve trans-  
4 formational and evolutionary improvements in detection  
5 capabilities for shielded and unshielded nuclear explosive  
6 devices and radiological dispersion devices.

7           “(b) HIGH-RISK PROJECTS.—The program shall in-  
8 clude funding for transformational research and develop-  
9 ment projects that may have a high risk of failure but  
10 have the potential to provide significant benefits.

11          “(c) LONG-TERM PROJECTS.—In order to reflect a  
12 long-term commitment to the development of more effec-  
13 tive detection technologies, the program shall include the  
14 provision of funding for projects having a duration of more  
15 than 3 years, as appropriate.

16          “(d) COORDINATION WITH OTHER FEDERAL PRO-  
17 GRAMS.—The Director shall coordinate implementation of  
18 the program with other Federal agencies performing simi-  
19 lar research and development in order to accelerate the  
20 development of effective technologies, promote technology  
21 sharing, and to avoid duplication, including through the  
22 use of the interagency coordination council established  
23 under section 1913.

1 **“SEC. 1905. SYSTEM ASSESSMENTS.**

2 “(a) IN GENERAL.—The Director shall carry out a  
3 program to test and evaluate technology for detecting nu-  
4 clear explosive devices and fissile or radiological material.

5 “(b) PERFORMANCE METRICS.—The Director shall  
6 establish performance metrics for evaluating the effective-  
7 ness of individual detectors and detection systems in de-  
8 tecting nuclear explosive devices or fissile or radiological  
9 material—

10 “(1) under realistic operational and environ-  
11 mental conditions; and

12 “(2) against realistic adversary tactics and  
13 countermeasures.

14 **“(c) PROVISION OF TESTING SERVICES.—**

15 “(1) IN GENERAL.—The Director may, under  
16 the program, make available testing services to com-  
17 mercial developers of detection devices.

18 “(2) FEES.—The Director may charge fees, as  
19 appropriate, for performance of services under this  
20 subsection.

21 **“(d) SYSTEM ASSESSMENTS.—**

22 “(1) IN GENERAL.—The Director shall periodi-  
23 cally perform system-wide assessments of the global  
24 nuclear detection architecture to identify  
25 vulnerabilities and to gauge overall system perform-  
26 ance against nuclear and radiological threats.

1           “(2) INCLUDED ACTIVITIES.—The assessments  
2 shall include—

3           “(A) red teaming activities to identify  
4 vulnerabilities and possible modes of attack and  
5 concealment methods; and

6           “(B) net assessments to determine archi-  
7 tecture performance against adversary tactics  
8 and concealment methods.

9           “(3) USE.—The Director shall use the assess-  
10 ments to guide deployment of the global nuclear de-  
11 tection architecture and the research and develop-  
12 ment activities of the Office.

13 **“SEC. 1906. TECHNOLOGY ACQUISITION, DEPLOYMENT,**  
14 **SUPPORT, AND TRAINING.**

15           “(a) ACQUISITION STRATEGY.—

16           “(1) IN GENERAL.—The Director shall develop  
17 and, subject to the availability of appropriations,  
18 execute a strategy for the acquisition and deploy-  
19 ment of detection systems in order to implement the  
20 Department components of the global nuclear detec-  
21 tion architecture developed under section 1903.

22           “(2) USE OF AVAILABLE CONTRACTING PROCE-  
23 DURES.—The Director shall make use of all con-  
24 tracting procedures available to the Secretary to im-  
25 plement the acquisition strategy.

1           “(3) DETERMINATION OF QUALIFIED ANTI-TER-  
2           RORISM TECHNOLOGY.—The Director shall make  
3           recommendations based on the criteria included in  
4           section 862(b) as to whether the detection systems  
5           acquired pursuant to this subsection shall be des-  
6           ignated by the Secretary as anti-terrorism tech-  
7           nologies that qualify for protection under the system  
8           of risk management set forth in subtitle G of title  
9           VIII. The Undersecretary for Science and Tech-  
10          nology shall consider the Director’s recommenda-  
11          tions and expedite the process of determining wheth-  
12          er such detection systems shall be designated as  
13          anti-terrorism technologies that qualify for such pro-  
14          tection.

15          “(b) DEPLOYMENT.—The Director shall deploy de-  
16          tection systems for use by Department operational units  
17          and other end-users in implementing the global nuclear  
18          detection architecture.

19          “(c) OPERATIONAL SUPPORT AND PROTOCOLS.—

20                  “(1) OPERATIONAL SUPPORT.—The Director  
21                  shall provide operational support for all systems ac-  
22                  quired to implement the acquisition strategy devel-  
23                  oped under subsection (a).

24                  “(2) OPERATIONAL PROTOCOLS.—The Director  
25                  shall develop operational protocols for detection tech-



1 nology acquired and deployed to implement the ac-  
2 quisition strategy, including procedures for alarm  
3 resolution and notification of appropriate response  
4 agencies in the event that illicit nuclear, radioactive,  
5 or fissile materials are detected by such a product or  
6 service.

7 “(3) TECHNICAL REACHBACK.—The Director  
8 will ensure that the expertise necessary to accurately  
9 interpret detection data is made available in a timely  
10 manner for all technology deployed to implement the  
11 global nuclear detection architecture.

12 “(d) TRAINING.—The Director shall develop and dis-  
13 tribute training materials and provide training to all end-  
14 users of technology acquired by the Director under the ac-  
15 quisition strategy.

16 “(e) SOLICITATION OF END-USER INPUT.—In devel-  
17 oping requirements for the research and development pro-  
18 gram of section 1904 and requirements for the acquisition  
19 of detection systems to implement the strategy in sub-  
20 section (a), the Director shall solicit input from end-users  
21 of such systems.

22 “(f) STATE AND LOCAL SUPPORT.—Upon request,  
23 the Director shall provide guidance regarding radiation  
24 detection technology acquisitions to be made by State, ter-

1 ritorial, tribal and local governments and emergency re-  
2 sponse providers.

3 **“SEC. 1907. SITUATIONAL AWARENESS.**

4 “(a) DETECTION INFORMATION.—The Director—

5 “(1) shall continuously monitor detection infor-  
6 mation received from foreign and domestic detection  
7 systems to maintain for the Department a situa-  
8 tional awareness of all nuclear threats;

9 “(2) shall gather and archive—

10 “(A) detection data measurements taken of  
11 benign activities in the normal flows of com-  
12 merce; and

13 “(B) alarm data, including false alarms  
14 and nuisance alarms.

15 “(b) INFORMATION SHARING.—The Director shall  
16 coordinate with other governmental agencies to ensure  
17 that the detection of unauthorized nuclear explosive de-  
18 vices, fissile material, or radiological material is promptly  
19 reported to all appropriate Federal response agencies in-  
20 cluding the Attorney General, the Director of the Federal  
21 Bureau of Investigation, the Secretary of Defense, and the  
22 Secretary of Energy.

23 “(c) INCIDENT RESOLUTION.—The Director shall as-  
24 sess nuclear threats communicated by Federal, State, trib-  
25 al, or local officials and provide adequate technical

1 reachback capability for swift and effective incident resolu-  
2 tion.

3 “(d) SECURITY.—The Director shall—

4 “(1) develop and implement security standards  
5 and protocols for the control and protection of all  
6 classified or sensitive information in possession of  
7 the Office; and

8 “(2) ensure that relevant personnel of the Of-  
9 fice have the required security clearances to properly  
10 handle such information.

11 **“SEC. 1908. FORENSIC ANALYSIS.**

12 “The Director shall perform all research, develop-  
13 ment, and acquisition activities of the Department per-  
14 taining to forensic analysis and attribution of nuclear and  
15 radiological attacks.

16 **“SEC. 1909. THREAT INFORMATION.**

17 “(a) THREAT ASSESSMENTS.—The Director shall  
18 utilize classified and unclassified nuclear and radiological  
19 threat assessments in designing the global nuclear detec-  
20 tion architecture under section 1903, prioritizing detection  
21 system deployments, and testing and optimizing system  
22 performance of that architecture, including assessments  
23 of—

24 “(1) smuggling routes;

1           “(2) locations of relevant nuclear and radio-  
2           logical material throughout the world;

3           “(3) relevant terrorist tradecraft and conceal-  
4           ment methods;

5           “(4) relevant nuclear and radiological threat ob-  
6           jects in terms of possible detection signatures.

7           “(b) ACCESS TO INFORMATION.—The Secretary shall  
8           provide the Director access to all information relating to  
9           nuclear and radiological threats, including reports, assess-  
10          ments, analyses, and unevaluated intelligence, that is nec-  
11          essary to successfully design, deploy, and support the op-  
12          eration of an effective global detection architecture under  
13          section 1903.

14          “(c) ANALYTICAL SUPPORT.—The Director shall re-  
15          quest that the Secretary provide to the Director, pursuant  
16          to section 201(d)(18), the requisite intelligence and infor-  
17          mation analysis support necessary to effectively discharge  
18          the Director’s responsibilities.

19          “(d) ANALYTICAL EXPERTISE.—For the purposes of  
20          performing any of the assessments required under sub-  
21          section (a), the Director, subject to the availability of ap-  
22          propriations, may hire professional personnel who are ana-  
23          lysts with experience in performing nuclear and radio-  
24          logical threat assessments.

1       “(e) COLLECTION REQUESTS.—The Director shall  
2 recommend to the Secretary consultation that should  
3 occur pursuant to section 201(d)(10) regarding intel-  
4 ligence collection to design, deploy, and support the oper-  
5 ation of the global detection architecture under section  
6 1903.

7       **“SEC. 1910. ADMINISTRATIVE AUTHORITIES.**

8       “(a) HIRING.—In hiring personnel for the Office, the  
9 Secretary shall have hiring and management authorities  
10 described in section 1101 of the Strom Thurmond Na-  
11 tional Defense Authorization Act for Fiscal Year 1999 (5  
12 U.S.C. 3104 note; Public Law 105–261). The term of ap-  
13 pointments for employees under subsection (c)(1) of that  
14 section may not exceed 5 years before granting any exten-  
15 sion under subsection (c)(2) of that section.

16       “(b) DETAIL OF PERSONNEL.—In order to assist the  
17 Director in discharging the Director’s responsibilities, per-  
18 sonnel of other Federal agencies may be detailed to the  
19 Office for the performance of analytic functions and re-  
20 lated duties.

21       “(c) TRANSFER OF SCIENCE AND TECHNOLOGY  
22 FUNCTIONS, PERSONNEL, AND ASSETS.—

23               “(1) TRANSFER REQUIRED.—Except as pro-  
24 vided in paragraph (2), the Secretary shall transfer  
25 to the Director the functions, assets, and personnel

1 of the Department relating to radiological and nu-  
2 clear countermeasures, including forensics of con-  
3 taminated evidence and attack attribution.

4 “(2) EXCEPTIONS.—The Secretary shall not  
5 transfer under paragraph (1) functions, assets, and  
6 personnel relating to consequence management and  
7 recovery.

8 “(3) ELIMINATION OF DUPLICATION OF EF-  
9 FORT.—The Secretary shall ensure that to the ex-  
10 tent there are complementary functions vested in the  
11 Directorate of Science and Technology and the Of-  
12 fice with respect to radiological and nuclear counter-  
13 measures, the Under Secretary for Science and  
14 Technology and the Director coordinate the pro-  
15 grams they administer to eliminate duplication and  
16 increase integration opportunities, particularly with  
17 respect to technology development and test and eval-  
18 uation.

19 **“SEC. 1911. REPORT REQUIREMENT.**

20 “The Director shall submit to the appropriate con-  
21 gressional committees an annual report on the following:

22 “(1) The global detection strategy developed  
23 under section 1903.

24 “(2) The status of implementation of such ar-  
25 chitecture.

1           “(3) The schedule for future detection system  
2       deployments under such architecture.

3           “(4) The research and development program of  
4       the Office.

5           “(5) A summary of actions taken by the Office  
6       during the reporting period to counter nuclear and  
7       radiological threats.

8       **“SEC. 1912. ADVISORY COUNCIL ON NUCLEAR DETECTION.**

9           “(a) ESTABLISHMENT.—There is established within  
10   the Office an Advisory Council on Nuclear Detection,  
11   which shall report to the Director (in this section referred  
12   to as the ‘Advisory Council’).

13          “(b) FUNCTIONS.—The Advisory Council shall, at the  
14   request of the Director—

15           “(1) advise the Director on recommendations  
16       for the global nuclear detection architecture devel-  
17       oped under section 1903(a);

18           “(2) identify research areas for development of  
19       next-generation and transformational nuclear and  
20       radiological detection technologies; and

21           “(3) and have such additional responsibilities as  
22       the Director may assign in furtherance of the De-  
23       partment’s homeland security mission with respect  
24       to enhancing domestic and international nuclear and  
25       radiological detection capabilities.

1       “(c) MEMBERSHIP.—The Advisory Council shall con-  
2 sist of 5 members appointed by the Director, who shall—

3               “(1) be individuals who have an eminent knowl-  
4 edge and technical expertise related to nuclear and  
5 radiological detection research and development and  
6 radiation detection; and

7               “(2) be selected solely on the basis of their es-  
8 tablished record of distinguished service; and

9               “(3) not be employees of the Federal Govern-  
10 ment, other than employees of National Labora-  
11 tories.

12       “(d) CONFLICT OF INTEREST RULES.—The Advisory  
13 Council shall establish rules for determining when one of  
14 its members has a conflict of interest in a matter being  
15 considered by the Advisory Council, and the appropriate  
16 course of action to address such conflicts of interest.

17       “(e) FEDERAL ADVISORY COMMITTEE ACT EXEMP-  
18 TION.—The Federal Advisory Committee Act shall not  
19 apply to the Advisory Council.

20       **“SEC. 1913. INTERAGENCY COORDINATION COUNCIL.**

21       “The Director shall—

22               “(1) establish an interagency coordination coun-  
23 cil to facilitate interagency cooperation for purposes  
24 of implementing this title, and



1           “(2) invite the Attorney General, the Secretary  
2           of Energy, the Secretary of State, the Secretary of  
3           Defense, and the heads of other appropriate Federal  
4           agencies to designate members to serve on such  
5           council.

6   **“SEC. 1914. AUTHORIZATION OF APPROPRIATIONS.**

7           “There is authorized to be appropriated to carry out  
8   this title—

9           “(1) \$536,000,000 for fiscal year 2007; and

10          “(2) such sums as may be necessary for each  
11       subsequent fiscal year.

12   **“SEC. 1915. DEFINITIONS.**

13          “In this title:

14          “(1) The term ‘Director’ means the Director of  
15       the Domestic Nuclear Detection Office.

16          “(2) The term ‘fissile materials’ means mate-  
17       rials capable of sustaining a nuclear chain reaction.

18          “(3) The term ‘global nuclear detection archi-  
19       tecture’ means a multi-layered system of detectors  
20       deployed internationally and domestically to detect  
21       and interdict nuclear and radiological materials in-  
22       tended for illicit use.

23          “(4) The term ‘Office’ means the Domestic Nu-  
24       clear Detection Office.

1           “(5) The term ‘radiological material’ means  
2 material that emits nuclear radiation.

3           “(6) The term ‘nuclear explosive device’ means  
4 an explosive device capable of producing a nuclear  
5 yield.

6           “(7) The term ‘technical reachback’ means  
7 technical expert support provided to operational end  
8 users for data interpretation and alarm resolution.

9           “(8) The term ‘transformational’ means that, if  
10 successful, will produce dramatic technological im-  
11 provements over existing capabilities in the areas of  
12 performance, cost, or ease of use.”.

13 (b) CONFORMING AMENDMENTS.—

14           (1) Section 103(d) of the Homeland Security  
15 Act of 2002 (6 U.S.C. 113(d)) is amended by adding  
16 at the end the following:

17           “(5) A Director of the Domestic Nuclear Detec-  
18 tion Office.”.

19           (2) Section 302 of such Act (6 U.S.C. 182) is  
20 amended—

21           (A) in paragraph (2) by striking “radio-  
22 logical, nuclear”; and

23           (B) in paragraph (5)(A) by striking “radi-  
24 ological, nuclear”.

1           (3) Section 305 of such Act (6 U.S.C. 185) is  
 2           amended by inserting “and the Director of the Do-  
 3           mestic Nuclear Detection Office” after “Tech-  
 4           nology”.

5           (4) Section 308 of such Act (6 U.S.C. 188) is  
 6           amended in each of subsections (a) and (b)(1) by in-  
 7           serting “and the Director of the Domestic Nuclear  
 8           Detection Office” after “Technology” each place it  
 9           appears.

10          (c) CLERICAL AMENDMENT.—The table of contents  
 11          in section 1(b) of the Homeland Security Act of 2002 (116  
 12          Stat. 2135) is amended by adding at the end the following:

“TITLE XIX—OFFICE OF DOMESTIC NUCLEAR DETECTION

“Sec. 1901. Domestic Nuclear Detection Office.

“Sec. 1902. Functions of Director of the Domestic Nuclear Detection Office,  
 generally.

“Sec. 1903. Global nuclear detection architecture.

“Sec. 1904. Research and development.

“Sec. 1905. System assessments.

“Sec. 1906. Technology acquisition, deployment, support, and training.

“Sec. 1907. Situational awareness.

“Sec. 1908. Forensic analysis.

“Sec. 1909. Threat information.

“Sec. 1910. Administrative authorities.

“Sec. 1911. Report requirement.

“Sec. 1912. Advisory Council on Nuclear Detection.

“Sec. 1913. Interagency coordination council.

“Sec. 1914. Definitions.”.

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